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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/941,313

08/29/2001

Robert J. Burnham

10541-451

6595

29074

7590

05/18/2005

EXAMINER

GENACK, MATTHEW W

VISTEON

C/O BRINKS HOFFER GILSON & LIONE

PO BOX 10395

CHICAGO, IL 60610

ART UNIT

PAPER NUMBER

2645

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/941,313

Applicant(s)

BURNHAM ET AL.

Examiner

Matthew W. Genack

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5-6, 10-11, 15-16, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavenik, U.S. Patent No. 4,313,208, in view of Loyd *et. al.*, U.S. Patent No. 6,462,775.

Regarding Claims 1, 6, 11, and 16, Kavenik discloses an audio entertainment and information system for the cabin of a commercial passenger aircraft (Column 7 Lines 16-20, Column 7 Lines 63-65, Fig. 1). There are several lamps, each connected to the aircraft's AC power source, for the purpose of illuminating the cabin's interior (Column 10 Lines 33-40, Fig. 1). Another component of the entertainment system is the radio frequency audio transmitter (Column 7 Lines 40-42, Column 8 Lines 32-54, Fig. 1). There exists an audio source, which provides audio signals to the transmitter, which is adapted to receive these signals and to transmit them throughout the passenger cabin by feeding an appropriate antenna system (Column 8 Lines 12-19, Column 17 Lines 56-60, Fig. 1, Fig. 10). Headsets are provided for the passengers, whereby said headsets are directly connected to equipment with the means for receiving the RF signals, controlling the volume, and selecting the audio channel (Column 7 Lines 23-26, Column 9 Lines 42-62, Fig. 3).

Kavenik does not expressly disclose placement of transmitters in the lamps, said transmitters connectable to the audio source and adaptable to receive information from said audio source and transmit signals containing said information within the vehicle's passenger compartment.

Loyd *et. al.* discloses a surveillance apparatus within a street lamp, said apparatus including an antenna and transmitter/receiver electronics (Abstract, Column 8 Lines 16-21, Column 10 Lines 31-40, Fig. 7).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Kavenik by using a lamp with a RF transceiver in the passenger compartment, said transceiver connectable to the audio source and adaptable to receive information from said audio source and transmit signals containing said information within the vehicle's passenger compartment.

One of ordinary skill in the art would have been motivated to make this modification because of the convenience and efficiency of combining two desirable vehicle devices into one device, thereby concealing the RF transmitter(s) from view of the passengers.

Regarding Claims 5, 10, 15, and 20, Kavenik in view of Loyd *et. al.* discloses every limitation of Claims 1, 6, 11, and 16, upon which Claims 5, 10, 15, and 20 depend, respectively, as outlined above. Furthermore, Kavenik discloses a wired connection between the audio transmitter and the audio source (Column 17 Lines 56-60, Fig. 10).

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3. Claims 2-3, 7-8, 12-13, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavenik in view of Loyd *et. al.*, further in view of Shamoon *et. al.*, U.S. Patent Application Publication 2003/0034897.

Regarding Claims 2, 7, 12, and 17, Kavenik in view of Loyd *et. al.* discloses every limitation of Claims 1, 6, 11, and 16, upon which Claims 2, 7, 12, and 17 depend, respectively, as outlined above.

Kavenik does not expressly disclose the use of LED transmitters as the audio transmitters of the audio entertainment system, nor does Loyd *et. al.* expressly disclose the use of LED transmitter with the lamps of the invention.

Shamoon *et. al.* discloses the use of a LED transmitter in conjunction with an entertainment center (0043 Lines 1-6, Fig. 5).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to use one or more LED transmitters of Shamoon *et. al.* in the audio entertainment system of the invention of Kavenik as modified by Loyd *et. al.*

One of ordinary skill in the art would have been motivated to make this modification because radiation from LED transmitters would not leave the aircraft and interfere with devices outside of said aircraft.

Regarding Claims 3, 8, 13, and 18, Kavenik in view of Loyd *et. al.* discloses every limitation of Claims 1, 6, 11, and 16, upon which Claims 3, 8, 13, and 18 depend, respectively, as outlined above.

Kavenik does not expressly disclose the use of an infrared transmitter as the audio transmitter of the audio entertainment system, nor does Loyd *et. al.* expressly

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disclose the use of an infrared transmitter in conjunction with audio signals in an entertainment system.

Shamoon *et. al.* discloses the use of an infrared transmitter in conjunction with an entertainment center (0038, Fig. 4).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to use one or more infrared transmitters Shamoon *et. al.* in the audio entertainment system of the invention of Kavenik as modified by Loyd *et. al.*

One of ordinary skill in the art would have been motivated to make this modification because radiation from an infrared transmitter would not leave the aircraft and interfere with devices outside of said aircraft.

4. Claims 4, 9, 14, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kavenik in view of Loyd *et. al.*, further in view of Claesson *et. al.*, U.S. Patent Application Publication 2002/0075965.

Kavenik in view of Loyd *et. al.* discloses every limitation of Claims 1, 6, 11, and 16, upon which Claims 4, 9, 14, and 19 depend, respectively, as outlined above.

Kavenik does not expressly disclose the use of digital signals in the audio entertainment system, nor does Loyd *et. al.* expressly disclose the use of digital audio signals.

Claesson *et. al.* discloses the use of digital audio broadcasting, whereby an analog audio signal is passed through an A/D converter at the broadcasting station (0093, Figs. 12a-12b).

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At the time the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Kavenik as modified by Loyd *et. al.* by broadcasting digital audio signals within the aircraft cabin, combined with the use of an A/D converter in the audio source as taught by Claesson *et. al.*

One of ordinary skill in the art would have been motivated to make this modification because of the higher degree of information fidelity inherent in digital broadcasting.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew W. Genack whose telephone number is 571-272-7541. The examiner can normally be reached on FLEX.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on 571-272-7547. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Matthew Genack

Examiner

Art Unit 2645

Matthew Genack

16 May 2005


FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600